

**DOI: 10.7596/taksad.v6i6.1207**

**Citation:** Kateb, F. (2017). Spiritual Art: A Study of Illuminated Drawings. Journal of History Culture and Art Research, 6(6), 221-232. doi:<http://dx.doi.org/10.7596/taksad.v6i6.1207>

## Spiritual Art: A Study of Illuminated Drawings

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### Abstract

Illumination can be seen as a collection of exquisite and novel designs that painters and illumination-workers use to make religious, scientific, cultural, historical, and other collections of work beautiful. The professionals of illumination use these techniques in books to beautifully virtualize the golden pages of the eternal literature and the religious texts of their homeland. In this way, the sides and margins of the pages are decorated with designs of Islimi (arabesque) branches, stems, flowers, and Cathay (Khataei) leaves. Illuminations like paintings have various schools and periods, such as the Seljuk, Bukhara, Timurid, Safavid, Qajar schools, with further branches within each school. The illuminations of different periods represent the states and spirits of those eras. However, the illustrated paintings have been performed in the primary state in each school and era with some minor differences in colors and designs, and it can be said that the basis of the illustrated designs are three geometric shapes of the square, circle and triangle, and the combination of these three shapes. In this article, we try to study illumination drawings in terms of the spiritual dimension and its effect on the soul and psych. Furthermore; we will study the spiritual nature of the motifs in order to achieve a deeper understanding of the spirit of Islamic art.

**Keywords:** Illumination drawings, Geometric drawings, Spiritual nature of motifs, Spirit of Islamic art.

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## **1. Introduction**

The background of illumination traces back to the art of book illumination in the Sassanid period. After the domination of Islam in Iran, the art of illumination was placed in the hands of the Islamic and Arab governments and was re-labeled as Islamic art. During the Seljuk period, the illumination workers were selected for the embellishment of the Holy Qur'an, instruments, dishes, woven fabrics and buildings, and later on, during the Timourid period the technique arguably reached its zenith, and the most beautiful works of illumination were created. Artists, bookbinders, and craftsmen were called from all over Iran at the request of the sultans and recruited in the capital's libraries. Thus, tremendous and magnificent works appeared.

During the Safavid period, paintings, illumination and calligraphy were used for the art of book embellishment and the decorated works were created that adorned the museums of Iran and the world. The history of the embellishment and illumination of the Qur'an was considered simultaneously with its writing. The headings of surahs, verses, pamphlets and prayer-carpet were typically decorated. Gradually, the Muslims' extraordinary interest in the Qur'an as well as the love of luxury led the artists to pay more attention to their illumination, and as a result these works went away from simplicity and were used as decoration. The technique was especially popular for the manuscripts prepared for rulers and other elders. This was one of the reasons for the artists' close attention to illumination, and the evolution of the illumination techniques. It can be said that illumination became known as the 'mother of the Islamic arts', because it presented the spirit of Islamic art in the form of delicate and beautiful drawings. Each of the motifs (drawings) based on their functions in the human life represents both the spiritual and beauty of life. The drawings, in their ultimate beauty, represent the abstract arabesque forms and display a manifestation of a vegetable spirit in the form of a Cathay (Khataei) flower. Cathay drawings are a set of flowers, buds, leaves and stems that appeared in a geometric format based on the rotation of the bindweed as the purifier of the arabesque motifs. In the present article, we will study the drawings and their spiritual nature as well as their effects, to investigate the 'pure designs' of Islamic art and its spiritual dimension.

## **2. History**

The effort of illumination artists remained unrecognized during their own time, and the art of painting, especially illumination, was subsequently greatly undervalued after the Safavid period. However, recently there has been a revival in the recognition of this art form, which has existed from at least the Sassanid era in the form of wall plastering, and perhaps even earlier in the form of pottery designs, that during the Islamic era were entered into the illuminations of texts. In the early Islamic era, the calligraphers themselves worked on the illumination, but gradually the division of labor became conventional among the artists. Most likely, at the first the calligrapher wrote down the text or the verses of the Qur'an and left some blank space for drawing images or illumination, so that some of these books that are already available show that a part of the illumination has not been completed.

From the sixth century onward, the embellishment and illumination of the Qur'ans were done as different from the way used in previous periods. The decorations lost their simplicity and geometric designs were replaced by foliage designs. These interwoven leaves remind human beings the Seljuk's motifs that were built on the mosques of this period in Isfahan, Qazvin and Ardestan. In the late thirteenth and early fourteenth centuries A.D. (late seventh and early eighth centuries A.H.), Tabriz was one of the most important centers to encourage and nurture artists of illumination and provided the further development of painting and gilding techniques. Especially in the early fourteenth century A.D., Khajeh Rashid al-Din, who was the founder of Roba'-i Rashidi near the city of Tabriz, helped bring more attention to the

calligraphy of the Quran and other books and their illumination and decoration, and as a result a new school known as the Tabriz School was created, which has had a great influence on the art of painting and illumination in the following periods. The Timurid period is therefore considered as one of the most important and thriving eras in the art of illumination.

The Timurid sultans became patrons of the art of book writing, with "Bai Sanqor Mirza", the son of Shahrokh as perhaps the greatest among them. The prince, in addition to being a man of art and drawing with techniques of writing, calligraphy, illumination and painting, lived among a large number of artists gathered around the Timurid Empire in the court, and Dar al-'Ilm and in the library that he had founded in Herat. In this city, papermakers, calligraphers, illumination-workers, bookbinders, drawers, painters and the like were of great importance. The books of this city are the most exquisite and beautiful books ever made.

At this time, artists paid great attention to drawing shapes, plants, flowers, landscapes and sometimes the picture of birds. The Qurans of this era, especially those provided for Shahrokh and Bai Sanqor Mirza, are among the most beautiful works of illumination art. Gold and azure were the main tools of their works and were used to make and illustrate the Qur'an and other books. The illumination industry reached its zenith during the Timurid era and continued during on to the Safavid period. At this time, the backgrounds of illuminations were usually blue and the divisions were smaller and seen in golden and black colors. Decorative designs were also done in white, yellow, red, blue and green colors.

### **3. The definition of Illumination**

In Persian dictionaries, there is no precise definition of illumination, that is, a definition that leads us to the origin of this art. In some old books which most of them are bibliographies only the name of painters and illumination workers have been mentioned that it is not enough to get a sense of illumination. In dictionaries, illumination has been defined as gold-blocking or overlaid with gold; but this is not all sense of illumination. In Persian encyclopedias, there are definitions of illumination that belong to the modes of illumination in a particular period of history. However, illumination can be considered as a collection of elegant and beautiful drawings that painters and illustration workers use to make more beautiful the religious, scientific, cultural, historical books, collection works, literary miscellanea and a beautiful pieces of calligraphy. Illumination professionals use beautiful collections everywhere in the books to make elegantly visualized the golden pages of eternal literature and the religious texts of their homeland. In this way, the sides of books and margins of the pages are decorated with designs of Islimi (arabesque) cutaways, stems, flowers, Cathay leaves, Islimi branches, Cathay flowers or a combination of them.

### **4. Etymology of the word "illumination"**

According to some sources, illumination (which is known as "Tazhib" in Persian) has been derived from the Arabic word "Zahab" which means "gold" and consists of regular geometric and plant designs decorated with golden water and drawings, and rarely any other color has been used in it, and if apart from gold water, other colors such as sorghum, white lazuli, and zeolite, and so on are used in it, that would be called Morasa' or Tarsia' which means studded with jewels. But today, usually both Morasa' or Tarsia' is called illumination (Tazhib). Although the word "illumination (Tazhib)" has been taken from Arabic, this does not mean that we can claim this art is an Arabian one.

In the Picture Dictionary of Visualized Arts, the equivalent "illumination" has been suggested for the word "Tazhib" and has been explained as "embellishment of manuscripts with gold color and delicate plant and flower drawings or intertwined geometric motifs.

According to the above-mentioned subject matters, art experts and lexicographers have considered illumination as an art related to the techniques of book design and book writing, and in their definitions they have not spoken of the direct influence of these decorative arts on other arts. In 11th and 12th centuries A.D. (5th and 6th centuries A.H.), that is, the age of Tiling Art, the art of illumination was entered into tile-making and across Iranian territory, every mosque, sanctuary, dome and cornice was decorated and dominated by it in order to more increase the greatness and spirituality of the houses of God (i.e. mosques).

After the acquaintance and familiarity with the profound teachings of the Qur'an and Islam, the Iranian Muslim artist came to a degree of insight and faith that lovingly and with remember of God and for His sake performed drawings (in holy places) and not for social necessity. This time the artists who intimately loved God and the Qur'an had come to the arena of the performance and creation of art in order to eternalize their devotion to God by their arts. However, what is indisputable is that, with the blessing of the Holy Qur'an, Islam provided the inner motive and factor in the beliefs of Iranian Muslim artists so that we witnessed the emergence of holy and spiritual art in the history of the art of our land.

## **5. The terms used in illumination**

Cloud, Islimi (Islamic/arabesque embellishment), Cathay (Khataei), branding, Farangi (European), Fassalli, knot, etc., are principles ruling the art of illumination, which are concisely defined here.

*Clouds:* Clouds are small and interconnected circles that are drawn at the edge of the sheet of paper so that a small cloud appears.

*Arabesque (Islamic/Islimi):* This art is the continuation of drawing during the Sassanid period and its evolution in the period of Islamic art. With the dominance of Islam on Iran, the decorating of Qur'an and Islamic religious books was promoted with Islimi (arabesque) drawings.

*Islimi cutaways (Band-i Islimi):* Islimi cutaways are the same Roman lines that are connected together and are of great beauty.

*Crown:* Crown is a design at the top of the illuminated sheet and has different types. A half or all of the crown design is used to decorate the heading of the book. Diadem (semi-crown), as the name implies, is a half of the crown that is designed in a sheet.

*Cathay (Khataei):* Cathay is one of the Iranian decorative arts created by combining flowers, buds and leaves and every rhythmic circle is called a Band (cutaway).

*Branding (Dagh):* It is the clue of the design that is created over another sheet.

*Torpedo mouth (Dahan Ezhdar):* It is a design that appears in the form of a dragon mouth. Apparently, this drawing has been prevalent in the Timurid era.

*Pin-show/pin badge:* It is the showing off some areas of gold with pin that performing it on knotting makes the design very beautiful. In the old days, sometimes this method was used to change the color of gold, because the pressure of special pins on the gold background could change the color of the gold plate. This method was more conventional in the Qajar period.

*Cornice (Shorfa):* Cornice (Shorfa) is the line that is plotted around the ornamental loop (Shamse) and makes it like the Sun and is often painted in azure color. Most of the time, a very small Islimi or Toranj design only with one color is designed at the top of the cornice.

*The ornamental loop (Shamse):* Shamse is a decorated Toranj inlaid with gold and lazuli that its great type is used at the first page of the frequently used books, that is, at the opening page of the book before

illumination and the heading. It is a circular or polygonal shape, and since the lines are like the Sun's rays and are scattered around it, they are called Shamse (Shams means the Sun). If several ornamental loops are found on the margin of the book, they are connected together with a short line. In this case, the ornamental loops do not have Cornice (Shorfa).

*Small Shamse:* The small Shamse, which is sometimes called Toranj, is a design on the beginning of the manuscript exquisite books or on the margin of the pages. In the old days, the small Toranj was placed on the top of the heading and adhered to it, but over time it was separated from the heading and placed besides next page and after the table. Small Shamse rarely sticks to the table. In the past and sometimes in the present, they usually connected several Shamses and used to decorate the books.

*European drawings (Farangi):* The flowers and plants that have been engulfed by other broad leaves are called Farangi drawings. Since these drawing leaves can be seen in the Sassanid carvings, the use of word "Farangi" (means European) is not acceptable for them.

*Fassalli:* Fassalli are package drawings that in motion of Islimi and Cathay- especially Islimi- go on through each other and the lines are separated by small Toranjs, but in same time, these lines are connected together. This connection of Islimi and Cathay is called Fassalli.

*Golden lasso (Kamand-i Zarrin):* It is the beautiful lines or flowers and leaves that have embraced the plan. These flowers and leaves are golden. Sometimes, a thin golden table with two black bars around it is also called golden lasso.

*Knot:* It is a drawing which is used at the edges of illumination instead of the table and is a design with interconnected chains. Sometimes, the junction of different parts of a design is called a knot.

*Quarter medallion (Lachak Toranj):* Each one of the four Toranjs that are designed at the corners of the painting sheet is called Lachak Toranj.

*Pendant (Lachaki):* It is a design used in the corner of the sheet as a triangular drawing; and in calligraphy, it can usually be seen in the corner of lines.

*Vaggireh:* It is a part of a greater design. For example, if we want to design a Shamse, we first divide it into several parts and implement it in one part which is called Vaggireh. This design is repeated in other parts.

*Sunburst (Toranj):* Toranj is one of the decorative arts of Iran that is usually located in the middle of drawings independently. This design is formed by combining flowers and leaves with arabesque designs, which is sometimes similar to frozen cresset. Sometimes two smaller symmetrical planes called Sar-Toranj are added to the two ends of the Toranj design. In the Toranj designs painted on the printed calicos, the tiles and wall drawings may make asymmetric the two designs of Sar-Toranj. In this case, the small top design is called higher Sar-Toranj, and the small bottom design is called lower Sar-Toranj. Sometimes in the corner of these designs, there are small drawings in the shape of pendant (Lachaki). The Toranj was designed in different large, medium, small shapes with different drawings and was mostly used in carpet weaving, painting and illumination. In the illumination of the manuscripts, the Toranj design is drawn up, illuminated and inlaid with golden color at the front page, and at the middle of it the name of book or the name of the person the book was written for whom or the content table was mentioned. The beautiful Toranj designs often belong to the Timurid painting.

*Sar-Toranj:* Sar-Toranj is a small Toranj that is drawn at the top of the larger Toranj or at margins of the sheets of the exquisite books. Sometimes in designing, two Sar-Toranjs, one as horizontal and the other as vertical, are used that the vertical Sar-Toranj is drawn smaller than the horizontal one.

*Definition of spiral arch (Ghaws-i Hallazoni):* Spiral arch is a rotational motion from the inside to outside that is used as a sign and symbol. The motion of stars and galaxies in a rotational line is similar to the

snail's movement. In fact, the tendency of people to the metaphysical powers and their curious attention to galaxies represent the massive dynamics of human for self-discovery and reaching excellence, and snail bow indicates the human progress to achieve a permanent objective, that is, transcendence. Taot-Ching says: "Access to the far-reaching objectives is progress, and much progress is to return to the self", and the spiral arch reflects eternity, because it continues to infinity. But, since man cannot have access to infinite, s/he makes finite the infinite and achieves it by her/his imagination. In fact, in different cultures and eras, this arch is the symbol of the progress of human spirit as well as human movement from internal to external to learn more and to reach eternity. In prehistoric times, the tribes used spiral arch as religious symbol and used it to decorate dishes.

## **6. Cathay (Khataei) and Islimi (Arabesques)**

The continuous and simple lines that spread across widespread spiral and snail twists, due to the very primitive simplicity and formality, were definitely the first arrays and artistic forms that human beings enjoyed to make beautiful the various surfaces. Such lines with the potential to be expanded at any level, whether geometric or non-geometric surfaces, and with various colors could double the aesthetic effects of any work. For this reason, such forms that were the production of spiral turns and the outer and inner flexibility of the lines quickly became one of the main motifs in a variety of artworks. These circular lines that generally their spiral and twisted turns are decorated with different types of flowers and leaves have been named as Cathay (Khataei) Decoration in the foundations of traditional Iranian design.

The simplicity of the Cathay cutaways (lines) and the possibility of decorating and embossing the corners or intermediate sections of each surface with it, such as a carpet, is such that it can be used not alone but in combination with other elements and the beautiful motifs and every moment of it is unfolded both in the mind and by drawing pen. The investigations show that the Cathay cutaways were changed to various and novel forms over time and through well-crafted virtues, which in the foundations of traditional Iranian designs are known as Slimi (arabesque) and perhaps after the Cathay cutaways, it is one of the most applicable designs of Iranian carpets. The comparison of the Cathay and Slimi forms indicates that the common properties of these two types of decoration in internal and external curves and motifs are nothing but common roots in their creation and functions. In fact, the placement of two appendages or shapes similar to small plugs (Joghe) at the end or at the sides of the thickened Cathay cutaways is nothing but a testament to the evolution of this motif. The salience of these appendages and their sophistication are powerful tools for nurturing and creating new forms that have been likened to the jaws of the mouth, and later were divided to several types.

## **7. Cathay (Khataei)**

### **7.1. *The definition of Cathy (Khataei) decoration and its types***

Cathy decoration is a diverse artistic design which is formed by combination of buds, flowers and leaves not based on its natural forms but based on the manner of decorative arts. From the Seljuk period, the very beautiful Cathay drawings were designed for decorating the Qur'an, other religious and scientific books, work collections, gypsum modeling of mosques, decoration of palaces, woven rugs, carpets and various tools. But during the Timurid period, the art of Cathay designing reached its climax, and the artists presented so beautiful shapes of this type of flower, leaves, and branches. Professor Ghias al-Din, who probably had the pen name of Mohammad Seya Qalam, was the founder of a new school in painting in the Timurid period and possessed his own method. Together with Prince Bai Sanqor Mirza and a group of other court officials traveled to China and this was when he was mastered in painting. Professor Ghias al-Din's sample works represented in the book of *The Paintings of Islamic Countries* show that his art works

were unique in its kind. In the Safavid period, the Cathay drawings became more complete and its types were increased. The professionals of illumination art increased the beauty of flowers and leaves and during the ruling of Shah Abbas Safavi, the flowers with a plethora of leaves become known as Shah Abbasi Flower. The basis of the Cathay design is the elegant curved lines that each of them is called cutaway (Band). These cutaways, such as the skeleton, cover all out of the design. To create harmony in a Cathay design, designers usually choose two to six types of flower, two to three types of bud and three to four types of leaves among thousands of flowers, leaves and buds and combine them based on their taste. A combination of Cathay and arabesque results in a design called Cathay-arabesque design and if the flowers and leaves of Cathay are placed on the spiral (snail) arch, it is called the Cathay motion.

## **8. Islimi (Arabesque)**

Each art has a language and it is this spontaneous language that expresses the secret of arts with a visual but symbolic language. There is certain intuition in Islamic era and among the states of the Muslim artists that represents the infinite universe in his/her artistic output. We described Cathay flowers and deployment of them in drawings in details, but Islimi (arabesque) is also a main member of this art. In the earthy world, there is nothing similar to Islimi and we can say that there is no example of it; it is a symbolic form which represents the simplest abstract-mathematical drawings.

The geometric forms and curves that turn towards themselves and each other in the middle part show off a unit which is completed by permanent rules and integration with an constant pace. All arabesque (Islimi) curves are with a face inwards and a face outwards; it is the essence of arabesques, tendency to inwards and outwards that both of them are in infinite direction, and this is a demonstration of immortalized conduct in art.

### **8.1. Definition of Islimi and its types**

Islimi or Islamic (design) is a design that has been used to adorn the dishes and woven materials and in carvings from far pasts and perhaps those times it has had its special name. However, this design has been almost named as Islimi from the Seljuk and Timurid periods and by the passage of time, it has been evolved in shape. Islimi design can be seen more in the carvings and gypsum modeling of the Sassanid and Islamic periods and since it had been used for embellishment of the Qur'an in the Islamic era, later it may be the reason to call this art the Islimi or Islamic design.

In Amid Persian Dictionary, the word 'Islimi' has been defined as "a kind of motif that consisted of the complex lines that are drawn in inscriptions and some other painting works". In Massaheb Persian Encyclopedia, we read: "Islimi is one of the Iranian styles in designing which consisted of spiral curve lines used in tiling, gypsum plastering and painting and designed in differentiated colors, and short branches, leaves and flowers that are branched from its spiral stem". According to some artists, the similarity of arabesque (Islimi) design to an elephant's trunk is due to the fact that the main pattern of it was an elephant's trunk and head.

Islimi is a design which creates a motion by Islimi cutaway and, as mentioned, Islimi branch is a decorative design which differs from Ilimi Turn (Gardesh-i Islimi) and Islimi alone does not have spiral, and if on it there are flowers and leaves, it cannot be considered as Islimi alone.

## **9. Clew (Chang) and knot**

Knot is common in the Cathay and arabesque decorations; but the clew (Chang) is arranged in a size larger than the knot and corresponding with the arabesque size which brings about an aesthetic form within the private limits and to create beauty by maintaining the lines, points, and level that their presence is

graceful at each image. Chang also be drawn using two circles and the establishment form of it on the stem creates a romantic ring. Chang along with arabesque appears in another form. In the establishment of arabesque on the stem of water-lily or bindweed, like Cathay flower, all elements are inwards the stem center, and as the Muslim pilgrims who are rotating around Ka'ba, the arabesque elements seem to be rotating around a central point.

#### **10. Arabesque form**

In appearance, arabesque decoration is similar to a cypress which is bowing and shows yielding. There are several elements in the arabesque collection which form the arabesque art. These elements are: 1) Bote Joghe [arabesque aigrette bush design], 2) the arabesque head, 3) clew (Chang) and knot, and 4) sign or form.

The arabesque Bote Joghe geometry is designed by drawing two circles within a larger circle.

#### **11. Sign (trace) and its variants**

In the abstract and sacred motifs rather than the Cathay and arabesque stems, there is an element which is called sign or form. There is a principle in abstract designs that the initial part of the stems of Cathay and arabesque should be hidden and in veil. The place of hiding which represents a symbolic commencement for the stems is called sign (or trace).

##### *11.1. Lachak sign or inscription sign*

The sign sometimes can be selected from the overall forms of Lachak-Toranj or inscription.

##### *11.2. Bote Joghe (aigrette-bush) sign*

Sometimes Joghe signs are similar to Bote Joghe signs that are in the course of their completion and finish the simple stages with elegant complexities. It must be said that a closed space or the signs are generally decorated with arabesques and clew.

#### **12. Heart mark**

Sign in a very elegant form sometimes appears like a heart, and has many varieties. The evolutionary course of the heart mark from the simple shape of heart to the various types of it can also be the sources of many drawings.

#### **13. Cloud sign (serpent arabesque)**

Sign in some other form is called cloud that is similar to sky clouds and has several types. In geometry of clouds, is better to draw circles and disappear the surrounding of these circles to show the general motion of the clouds.

#### **14. The symbol of the illuminated geometric patterns**

Any geometric shape that can be used in this art is a symbol that is expressed through geometric scheme. The definition of square, circle, center, etc. is to reveal their inner meaning rather than their material and mathematical meanings. Repetition of the pattern in illumination and other Islamic arts is affected by the thought that the world has been constituted from very subtle elements which these elements are equal and have been differentiated from each other. So people because of not competing with God can recombine the elements of nature in any way they know appropriate.



#### *14.1. The geometric symbol of circle*

The circle starts from expansion of a point. The point is the first unit, of which the line is created, and then the surface is created from line and the volume is created from surface (Gunri, 1996: 196). In fact, it is to believe in a common origin of elements that are coordinated with each other and arise from one origin which is at the center that the derived points reach climax in congruent with this central point. As Burckhardt points out, the circle itself is a point which has expanded and the point is an absolute symbol or the transcendent essence (1981: 87). In the viewpoint of the Muslim scholars, this geometric shape is of great important. Both in Farabi's treatise and in Bozjani's treatise [outstanding mathematician of 10th century, A.D.], circle which both circular volumes and the motions of spherical bodies is based on it is of great importance and position. In Bozjani's treatise, to draw all the polygons of regular plane it has been used.

#### *14.2. The geometric symbol of triangle*

When the three circles are tangent to each other at the outermost points, the first polygon, that is, triangle arises. According to Bolkhari, in the chapter of Tabi'yyat (Natural sciences) of the book Shafa, Avicenna (Ibn Sina) pays special attention to the elements of geometric shapes. He believes that the four elements create surfaces that necessarily should be straight, and since the simplest shape is a triangle, so all bodies are made of triangles. Fire is in the shape of a pyramid that its base consisted of four triangles, and water is a shape which its basis consisted of twenty regular triangles and air is a shape which its basis consisted of eight regular triangles, as well as soil is a cubic which is formed by square surfaces and the square is potentially made of triangles (Bolkhari, 2007: 65).

Triangle is considered the symbol of three levels of sensuality, reproaching soul and the soul at peace (nafs-i mutma'innah), and humans must pass these three basic steps to reach perfection. Triangle represents the three heavenly, earthly and infernal worlds and is corresponding with the triple division of human as spirit, soul and body.

#### *14.3. The geometric symbol of square*

One of the most important geometric shapes is square and is known as one of the most well-known mysterious forms. Square is a static and stable form, with equal sides and angles which creates a sense of stillness, strength, enclosure, perfection and establishment. In the limit of four, square is one of the most stable forms and the representative of the most embodied and stable aspect of creation. Square is a balanced shape which is formed by combination of vertical and horizontal lines with the same size. Number 'three' as a principle represents trinity and its formal sense is triangle as the mother of the shape and is associated with surface. Number 'three' is merely the principle of the creation and generates the crossing between the visible and superior territories; while number 'four' ultimately represents the first entity born, that is, the natural world and if of square shape (Leveler, 1987).

In various Islamic areas and in different arts, the three main shapes of circle, triangle and square, in addition to apparent beauty by keeping the mysteriousness and profound meaning laid in themselves in the works of artists, have reflected the culture of Muslim artists. The nature of geometric drawings is based on discipline and balance, which exists in the formal sample square of the number 'four' as one of the most complete figures; it is the number of divine perfection and completion of manifestation. According to Euclidean geometry, the number 'four' becomes square as much as a static form. Square refers to the following concepts:

The secret of the Divine Throne and its bearers; the secret of the fourfold steps of numbers; the physical, natural and elemental forms in human beings, in the four angels, in the four divine foundations (Otads), in four inner thoughts, in the four types of death, in the four divine truths, in the four elements, in the four

natures and divine throne.

## 15. Geometry of designs

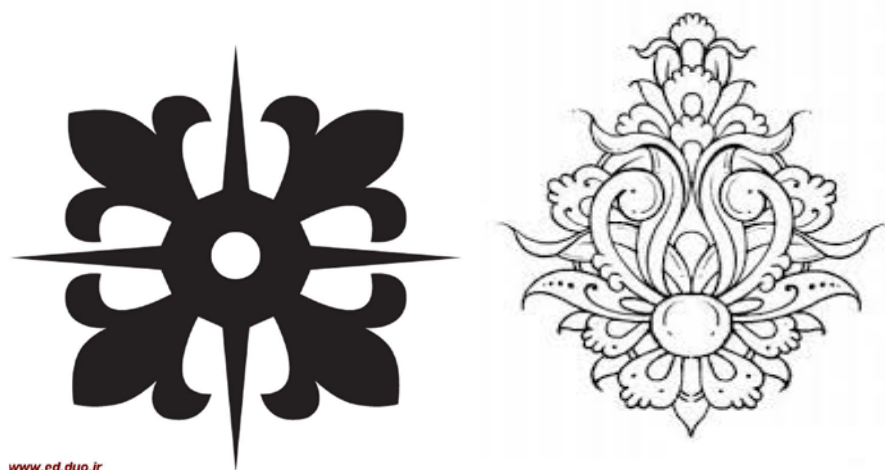
In Mo'in Persian dictionary, the word 'size' has been used as the equivalent of 'geometry' (Hindesseh in Arabic) and has been defined as a science which deals with shapes, dimensions, and measurements (Mo'in Persian dictionary, the entry of Hindesseh [geometry]). In Western texts, it is said that the word 'geometry' has been taken from 'geometers' that is a Greek word which means the expertise of land-surveyor and topographer. In geometry, each shape is the equivalent of a number which is corresponding with that shape in terms of secret meaning. The number 'one' represents the principle of the Absolute Unity and mostly is used as the representation of God and in the terms of form, represents 'point'. The number 'two' represents the principle of duality and the plenty of force and plurality and in its formal meaning indicates the systematic framework for artist in expressing abstraction and his/her subjective concepts. Circular is a shape, when divided into equal parts, creates a regular polygon. This displacement and transfer of proportion is derived from the monotheistic view that on the basis of it the unity is the endpoint of plurality and dispersion.

## 16. Unity in circle, triangle and square geometric designs

Although the unity is an objective fact, it appears as an abstract and subjective concept in the human view. Islam is based on monotheism and the unity cannot be stated and shown with any image. But the use of images in Islamic art has not generally been banned (Al-Behnasi, 2006: 91). The basis of images and motifs in Islamic art is based on the special balance, order and rules used in the artwork structures, and the qualitative and fundamental principle, which is their viability and beauty, derives from monotheistic thinking which through laws and fitness of components makes correspondent the artwork with the spiritual truth. The Islamic art gives spiritualized honesty to material and its objective is to appear the essence of art, i.e. beauty; and always it is compatible with the spirit of Islam which is Monotheism (Nasr, 2001: 439).

'Point' is as a focus with a center specifying the movement and the spread of it results in a 'circle' and the continuation of it results in a 'line'. It creates a quality of beauty in geometric shapes which displays a range of integrity, of which the universe begins. This thinking has its origins in Islamic thought that attributes everything to God as the source of all affairs.





**Figure 1.** Examples of illumination motifs. Source: (www.ed.duo.ir; www.dl.poone.ir)

## 17. Conclusion

The physical universe is based on geometry, cosmic laws of proportion and order and with correspondence among the three stages of the universe, which are, the intellectual world, the absolute imagination world and the material world. Geometric forms are decoders of the exemplar forms of the objects and creatures of nature. In relation to God's nature, entity, and the truth of his justice in the creation of the universe. Geometry refers to the intrinsic value and limits of things and phenomena. Limit of anything is as its entity and the form of anything is shown based on geometric patterns. In the Islamic arts, the form is the representation of eternal monotheistic truths and in the field of visual imagination it is expressed as geometric crystalline shapes. Triangle, circle and square are considered the most important geometric symbols in Islamic culture and art. The combination of timelessness and dynamics of circle with inertia balance of square along with semantic triples of triangle creates a profound and interesting effect in artwork with a variety of shapes. The monotheistic foundation of these three shapes is the most important entity of these drawings. The artworks based on these three shapes are related to monotheism formed in the different understandings of the Muslim artist in the Islamic view, which theses understandings and creation of beautiful drawings are the attractions of the Islamic art of illumination.

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